IN THE CLAIMS:

1. (Currently Amended) A system for rehabilitation of a hearing disorder, comprising:

at least one acoustic sensor, located upstream of analog-digital converters, for picking up an acoustic signal and for converting it into an electrical audio signal,

an electronic signal processing unit for ~~audio signal~~ processing and ~~amplification~~ amplifying said electrical audio signal,

an electrical power supply unit which supplies individual components of the system with current, and

an actuator arrangement which is ~~provided~~ configured for positioning in a single external auditory passage with at least one output actuator selected from the group consisting of electroacoustic, electromechanical, and purely electrical actuators, and any combination thereof, for stimulation of damaged hearing based on the electrical audio signal processed in the electronic signal processing unit,

wherein the signal processing unit has a speech analysis and recognition module and a speech synthesis module for facilitating the transmission of speech information in a noisy environment; and

wherein the speech analysis and recognition module has an arrangement for detecting and extracting additional prosody of the speech information, and wherein the speech synthesis module is provided with an arrangement for taking into account the prosody of speech information in speech synthesis.

2. (Original) The system as claimed in claim 1, wherein the signal processing unit has a digital signal processor which contains software modules for speech analysis and synthesis.

3. (Original) The system as claimed in claim 2, wherein the speech analysis and speech recognition module and the speech synthesis module are adaptive.

4. (Original) The system as claimed in claim 2, wherein the speech analysis and speech recognition module and the speech synthesis module are re-programmable.

5. (Original) The system as claimed in claim 1, wherein the speech analysis and speech recognition module and the speech synthesis module include a digitally implemented neural network.

6. (Original) The system as claimed in claim 1, wherein the speech analysis and speech recognition module and the speech synthesis module are adapted to transmit phonetic categories between them.

7. (Original) The system as claimed in claim 1, wherein the speech analysis and speech recognition module and the speech synthesis module are adapted to transmit lexical categories between them.

8. (Canceled).

9. (Currently Amended) The system as claimed in claim 1, [[8,]] wherein the arrangement for detecting and extracting prosody of speech information is adapted for extraction of level and characteristic of fundamental speech frequency for voiced sounds, and wherein the arrangement for taking into account prosody of speech information in speech synthesis is adapted to effect the corresponding modulation of the output signal.

10. (Original) The system as claimed in claim 1, wherein the speech analysis and recognition module and the speech synthesis module are adapted to be turned off to enable processing of audio signals without speech analysis and synthesis.

11. (Original) The system as claimed in claim 10, further comprising means for automatically turning off the speech analysis and recognition module and the speech synthesis module at a low level of interfering sound.

12. (Original) The system as claimed in claim 10, further comprising means for turning off the speech analysis and recognition module and the speech synthesis module by remote control.

13. (Original) The system as claimed in claim 1, wherein the signal processing unit contains software modules adapted to enable masking of tinnitus parallel to operation of the hearing aid.

14. (Original) The system as claimed in claim 1, wherein the signal processing unit has a preprocessing arrangement for at least one of pre-amplification and filtering, and has an A/D converter for analog-digital (A/D) conversion of the acoustic signals.

15. (Original) The system as claimed in claim 14, wherein the preprocessing arrangement comprises an anti-aliasing filter.

16. (Previously Presented) The system as claimed in claim 1, wherein a plurality of acoustic sensors are provided, each of the acoustic sensors being upstream of an analog-digital converter.

17. (Original) System as claimed in claim 1, wherein at least one digital-analog converter is connected upstream of the actuator arrangement.

18. (Original) The system as claimed in claim 1, wherein the actuator arrangement comprises a plurality of actuators, and wherein a respective digital-analog converter is connected upstream of each actuator.

19. (Original) The system as claimed in claim 17, wherein the signal processing unit has a digital signal processor for processing A/D-converted acoustic sensor signals which have been preprocessed by means of the preprocessing arrangement and for generation of digital signals for tinnitus masking.

20. (Original) The system as claimed in claim 14, wherein the signal processing unit has a digital signal processor for processing A/D-converted acoustic sensor signals which have been preprocessed by means of the preprocessing arrangement and for generation of digital signals for tinnitus masking.